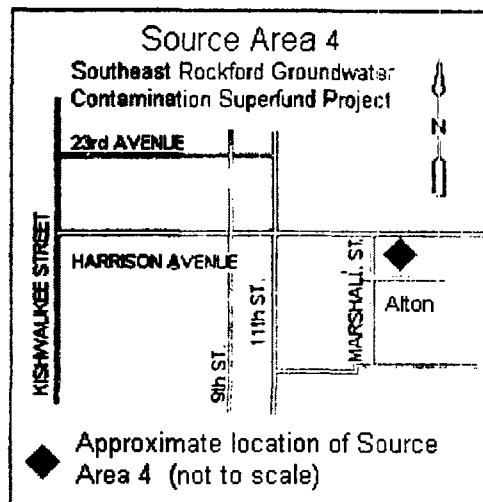




# Limited Excavation of Contaminated Soil Source Area 4

## Southeast Rockford Groundwater Contamination Superfund Site

In September, the Illinois Environmental Protection Agency (Illinois EPA) will excavate a small quantity of contaminated soil at the former Swabco facility at the corner of Marshall and Alton Streets in Southeast Rockford.



**Why is the Illinois EPA excavating this soil?** The Illinois EPA and U.S. Environmental Protection Agency (U.S. EPA) have signed a record of decision to remedy contaminants found in what is called Source Area 4. (See story below.) To prepare for the construction of that remedy, the Illinois EPA conducted additional investigations in the area. Investigation results showed free product and contaminated soil near the building and closer to the surface than expected. Since the contamination is so close to the surface, the Illinois EPA and U.S. EPA decided that removing these soils and free product is necessary to prevent human exposure. Also, removing this quantity of contaminated soil and free product will have the immediate effect of reducing movement of contaminants off site in groundwater. The remedy of the remaining contamination is planned for 2006.

**What is Source Area 4?** Illinois EPA investigations beginning in 1991 identified Area 4 as one of four major sources of private well contamination in southeast Rockford. It is located at the corner of Marshall and Alton Streets in Southeast Rockford. Investigations showed that sources of contamination in Area 4 appear to be from spillage and disposal of waste oils and industrial solvents. Information on the other three source areas is available from sources listed on page 2. The site was placed on the federal Superfund in 1989.

**Is my water safe to drink?** Area 4 residents who are using Rockford Public Water Supply do not have to worry about the safety of their drinking water. The Rockford Water Supply is regularly tested for possible contaminants. Water that violates U.S. EPA drinking water standards is not distributed to the public.

**Will excavation release harmful levels of contaminants into the air?** No. The contaminants are industrial solvents in a category called volatile organic compounds (VOCs), which means that they do evaporate readily at normal indoor/outdoor temperatures. To protect the public and the workers, the Agency and its contractor will monitor the air continuously. Workers may wear respirators as a safety precaution to prevent possible exposure to unsafe levels of contaminants that may be present at the excavation hole. If total concentrations at the site boundary reach one part per million above background of total VOCs, the Illinois EPA will take corrective action to contain any emissions and possibly shut down the operation. One part per million total VOCs is below the level that would be harmful to humans.



**Will there be odors?** There may be odors. Some of the chemicals found at this site give off significant odors at levels that are not harmful to human health. Smelling chemicals, in this case does not necessarily mean that harmful levels of chemicals are in the air. The Agency's continuous air monitoring will ensure that harmful levels of contaminants are not leaving the site.

If odors become a problem, the Agency has authorized the use of foam in the excavation hole and in the roll-off box where the excavated soil will be placed. This foam is designed to greatly reduce odors. Illinois EPA staff will be talking to nearby residents about steps that can be taken if odors become offensive beyond the boundaries of the excavation. The roll-off boxes of excavated soil will be removed at the end of each workday and properly disposed of offsite.

**What is going to be done with this contaminated soil and free product?** The contaminated soil and free product will be disposed of in an appropriate offsite landfill or treatment facility.

**How long will excavation take?** Excavation of this small quantity of soil and free product is expected to take two to three days.

**Work planned for November.** In November, the Illinois EPA will conduct more work at the site in preparation for implementation of the final remedy in 2006. November work will include soil borings to determine the amount of soil that must be excavated and treated in 2006. Also, a temporary system will be installed on site to determine the amount of groundwater that will have to be pumped and the rate at which the groundwater will have to be treated.

**What is the final remedy for Source Area 4?** The 2002 record of decision for Source Area 4 requires one remedy for soil and one remedy for leachate. The soil remedy includes institutional controls, soil excavation and on-site treatment of contaminated soils by low temperature thermal desorption. The leachate remedy is institutional controls plus leachate containment and treatment. The construction of this remedy is planned for 2006. The Illinois EPA will be distributing additional information about this action closer to the time of construction.

### **FOR MORE INFORMATION**

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More information is also available at the **project repository** located in the Rock River Branch of the Rockford Public Library (3128 11th Street in Rockford). Call for library hours at 815/398-7514. The **administrative record file** is located at the Illinois EPA headquarters in Springfield, Illinois. Call 217/782-9878 for an appointment. The administrative record file, in microfiche form, is also located at the Main Branch of the Rockford Public Library at 215 N. Wyman in Rockford. This file contains all the documents that are the basis for Illinois EPA and U.S. EPA decisions for this project. You may also visit the **Illinois EPA website** at <http://www.epa.state.il.us/community-relations/fact-sheets/southeast-rockford/index.html>

# Definition of Terms

**Free product.** A phase of a chemical in groundwater. When a contaminant is present in high enough concentrations, it does not dissolve in the water. Rather, if it is lighter than water (like oil), it will float on top of the water. If it is heavier than water, it will sink through the water until it comes to barrier such as rock or clay.

**Groundwater.** Water beneath the ground surface.

**Institutional controls.** An administrative or legal constraint that limits land or resource use. Controls could include zoning restrictions, city ordinances, easements, covenants, consent decrees and notices on deeds or state registries.

**Leachate.** Water that has passed through waste and picked up contaminants present in the waste. In this fact sheet, the term leachate refers to all contaminated groundwater within the groundwater management zone boundary that is established for each source area.

**Low Temperature Thermal Desorption Unit (LTTD).** A method of treating soil to remove VOCs. In this method, the VOC contaminated soil is placed into the LTTD primary chamber, and the soil is heated to about 1000°F. This temperature turns the VOCs into gas (vapor) and the VOCs evaporate out of the soil. The VOC vapors are heated to 1600°-1800°F to break the VOCs down into carbon dioxide (a common compound in the air we breathe), water and hydrochloric acid. The acid will be neutralized in a scrubber before carbon dioxide and water are released to the air.

**Superfund.** The common name given to sites on the National Priorities List (NPL). The NPL is a list of the nation's most hazardous sites that are eligible for investigation and, if necessary, a remedy under the federal Comprehensive Environmental Response, Compensation and Liability Act. The Southeast Rockford Groundwater Contamination project was placed on the NPL in 1989.

**Volatile organic compounds (VOCs).** A class of chemicals that are volatile and contain carbon. Volatile means the compounds vaporize (evaporate) readily at normal indoor/outdoor temperatures. The compounds are called organic because they contain carbon. The main contaminants found at this site are industrial solvents and their break down products. These chemicals are categorized as volatile organic compounds.